AMENDMENTS TO THE CLAIMS

- 1-33. (Cancelled)
- 34. (Currently Amended) A system for programming a packet-based network having plural a plurality of nodes for providing services to network subscribers, the system comprising: a service creation tool operable to program a service definition package, said service definition package defining a plurality of packet processing behaviors; a service control center interfaced with the packet-based network and operable to accept said service definition package for deployment to predetermined at least one network nodes node, said service control center comprising:
 - a first logic element operable to select one or more network processors for implementing said service definition package;
 - <u>a second logic element operable to provide network processor-specific</u> <u>instructions and data to perform packet processing behaviors;</u>
 - a third logic element operable to load said instructions and data into said one or more network processors;
 - a fourth logic element operable to monitor information from one or more network processors; and
 - a fifth logic element operable to utilize said information from said one or

 more network processors to report status information about said

 service definition package;

and

at least one network node interfaced with the network, the node having a network processor, the node operable to perform the one or more packet processing behaviors translated from a network programming language.

35-46. (Cancelled)

47. (Currently Amended) A method for providing network services to subscribers using a programmable packet-based network having plural a plurality of nodes, at least one of said nodes having a network processor, said nodes operable to perform one or more packet processing behaviors translated from a network programming language, the method comprising:

using a service <u>creation</u> tool to program a service definition package, said service definition package defining a plurality of packet processing behaviors; and using a service control center to accept said service definition package for deployment to network nodes on said packet-based network;

selecting one or more network processors for implementing said service definition package;

providing network processor-specific instructions and data to perform packet processing behaviors;

loading said instructions and data into said one or more network processors;
monitoring information from said one or more network processors; and
utilizing said information from said one or more network processors to report status
information about said service definition package.

48 - 59. (Cancelled)

- 60. (New) The system of claim 34, wherein said fourth logic element performs said monitoring indirectly using a proxy function.
- 61. (New) The system of claim 35, wherein said proxy function utilizes an element manager function to provide access to information for said monitoring function.
- 62. (New) The system of claim 34, further comprising a sixth logic element operable to validate said network processors for implementing said service definition package.
- 63. (New) The system of claim 34, wherein a seventh logic element selects polling tasks used for said monitoring.

- 64. (New) The system of claim 34, wherein an eighth logic element summarizes status information obtained from said monitoring.
- 65. (New) The method of claim 47, further comprising: performing said monitoring indirectly using a proxy function.
- 66. (New) The method of claim 48, further comprising: utilizing an element manager function to provide access to information for said monitoring function.
- 67. (New) The method of claim 47, further comprising: validating said network processors for implementing said service definition package.
- 68. (New) The method of claim 47, further comprising: determining polling tasks used for said monitoring.
- 69. (New) The method of claim 47 further comprising: summarizing status information obtained from said monitoring